

Title (en)

Combustor dome with combined deflector/mixer retainer

Title (de)

Brennerkuppel mit kombinierter Ablenker-/Mischerhalterung

Title (fr)

Dôme de chambre de combustion avec retenue combinée de déflecteur/mélangeur

Publication

**EP 2541149 A3 20171115 (EN)**

Application

**EP 12174176 A 20120628**

Priority

US 201113174027 A 20110630

Abstract (en)

[origin: EP2541149A2] A combustor dome assembly includes a dome plate (34) with upstream and downstream faces (31,33) and an aperture (36) therein; a deflector (38) with body (42) and a tube section (54), the deflector fixedly attached to the dome plate adjacent the downstream face with the tube section (54) in the aperture (36); a retainer (39) having an annular body with a central opening therein, an annular flange, and at least one hook (72) defining a slot, the retainer (39) being fixedly attached to the dome plate (34) adjacent the upstream face of the dome plate with the flange received in the aperture; and an annular mixer (40) with a radial array of swirl vanes (86) and an annular mounting flange (88), with a retention tab (94) extending radially outward from the mounting flange. The mixer is disposed adjacent the upstream face with the mounting flange against the retainer. The retention tab is engaged in the slot defined by the hook to prevent axial withdrawal of the mixer from the retainer.

IPC 8 full level

**F23R 3/28** (2006.01); **F23R 3/14** (2006.01)

CPC (source: EP US)

**F23R 3/14** (2013.01 - EP US); **F23R 3/283** (2013.01 - EP US); **F23R 2900/00017** (2013.01 - EP US); **Y02T 50/60** (2013.01 - EP US); **Y10T 29/49348** (2015.01 - EP US)

Citation (search report)

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- [A] US 5117637 A 19920602 - HOWELL STEPHEN J [US], et al
- [A] JP S5510077 U 19800122
- [A] US 2002162333 A1 20021107 - ZELINA JOSEPH [US]
- [A] US 6412272 B1 20020702 - TITTERTON III GEORGE F [US], et al
- [A] US 6427435 B1 20020806 - PATTERSON DAVID BRUCE [US], et al
- [A] EP 1172611 A1 20020116 - GEN ELECTRIC [US]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2541149 A2 20130102; EP 2541149 A3 20171115; CA 2781938 A1 20121230; JP 2013015312 A 20130124; JP 6017859 B2 20161102; US 2013004906 A1 20130103; US 8726669 B2 20140520**

DOCDB simple family (application)

**EP 12174176 A 20120628; CA 2781938 A 20120628; JP 2012146201 A 20120629; US 201113174027 A 20110630**